

ABSTRACT

A high efficiency, liquid supply vessel is provided. The liquid supply vessel includes a chamber, either an open-foam or septum-based fluidic interconnect, a tower, and at least one gas-permeable vent. The tower includes a valve which remains closed when the vessel is inserted into a printer and the fluidic interconnect is engaged, thereby retaining the liquid in the vessel. When the printhead is operated, a sufficient vacuum is created to open the valve, thereby supplying the liquid to the printhead. Whereas the vacuum pressure may otherwise rise to unacceptable levels, the gas-permeable vent enables the pressure to be equalized. Similarly, the vent equalizes pressure during altitude and/or temperature changes, thereby preventing pressure increases or decreases which would otherwise be associated with such changes.